



AX58x00 SSC Tool Configuration Import User Guide

Revision 1.00
December 5th, 2024



Revision History

Revision	Date	Description
1.00	2024/12/05	Initial release



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1. Introduction

The SSC Tool is provided by ETG (EtherCAT Technology Group) and used for generate EtherCAT SSC (Slave Stack Code). Any legal ETG members can use this tool to generate several workable SSC sample codes that provide by BECKHOFF or other companies, or they also can specify their application through the tool. This guide will describe how to import the configuration file of particular application and generate related source files.

Note1: ASIX configuration file is based on SSC Tool v5.13

Note2: Please make sure your system has Microsoft EXCEL 2013 or later before using SSC Tool

Note3: This article will use AX58200 “Ethercat_GPIO_AIO_Reference_Design” project as an example.

if you'll use other reference design project, please adjust the path as below of project, configuration and Excel file by yourself.

- AX58100_BSP

- Ax58100_GpioAio

BSP_ROOT\SampleCode\Ax58100_GpioAio\For_SSC_Tool\AX58100_GPIO_8Bit_AIO_16Bit.esp

BSP_ROOT\SampleCode\Ax58100_GpioAio\For_SSC_Tool\Import\Configuration\AsixAx58100GpioAioConfigurations.xml

|

BSP_ROOT\SampleCode\Ax58100_GpioAio\For_SSC_Tool\Import\Configuration\files\AX58100_GPIO_8Bit_AIO_6Bit.xlsx

- Ax58100_MotorControl

BSP_ROOT\SampleCode\Ax58100_MotorControl\For_SSC_Tool\AX58100_MotorControl.esp

BSP_ROOT\SampleCode\Ax58100_MotorControl\For_SSC_Tool\Import\Configuration\AX58100_MotorControlConfigurations.xml

BSP_ROOT\SampleCode\Ax58100_MotorControl\For_SSC_Tool\Import\Configuration\files\AX58100_MotorControl.xlsx

- AX58200_BSP

- Ethercat_GPIO_AIO_Reference_Design

BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\AX58200_GPIO_8Bit_AIO_16Bit.esp

BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\Import\Configuration\AsixAx58200GpioAioConfigurations.xml

BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\Import\Configuration\files\AX58200_GpioAio.xlsx

- Ethercat_MotorControl_Reference_Design

BSP_ROOT\SampleCode\Ethercat_MotorControl_Reference_Design\For_SSC_Tool\AX58200_MotorControl.esp

BSP_ROOT\SampleCode\Ethercat_MotorControl_Reference_Design\For_SSC_Tool\Import\Configuration\AsixAx58200MotorControlConfigurations.xml

BSP_ROOT\SampleCode\Ethercat_MotorControl_Reference_Design\For_SSC_Tool\Import\Configuration\files\AX58200_MotorControl.xlsx

- AX58400_BSP

- Ax58400_GpioAio

BSP_ROOT\SampleCode\Ax58400_GpioAio\For_SSC_Tool\AX58400_GPIO_8Bit_AIO_16Bit.esp

BSP_ROOT\SampleCode\Ax58400_GpioAio\For_SSC_Tool\Import\Configuration\AsixAx58400GpioAioConfigurations.xml

|

BSP_ROOT\SampleCode\Ax58400_GpioAio\For_SSC_Tool\Import\Configuration\files\AX58400_GPIO_8Bit_AIO_16Bit.xlsx

- Ax58400_MotorControl

BSP_ROOT\SampleCode\Ax58400_MotorControl\For_SSC_Tool\AX58400_MotorControl.esp

BSP_ROOT\SampleCode\Ax58400_MotorControl\For_SSC_Tool\Import\Configuration\AX58400_MotorControlConfigurations.xml

BSP_ROOT\SampleCode\Ax58400_MotorControl\For_SSC_Tool\Import\Configuration\files\AX58400_MotorControl.xlsx

2. Download The SSC Tool

You can download the SSC Tool through below hyperlink:
[ETG_SSC_Tool_Download](https://www.ethercat.org/en/downloads/downloads_01DCC32A10294F2EA866F7E46FB0285F.htm)

Click the link (red square) of below screen.

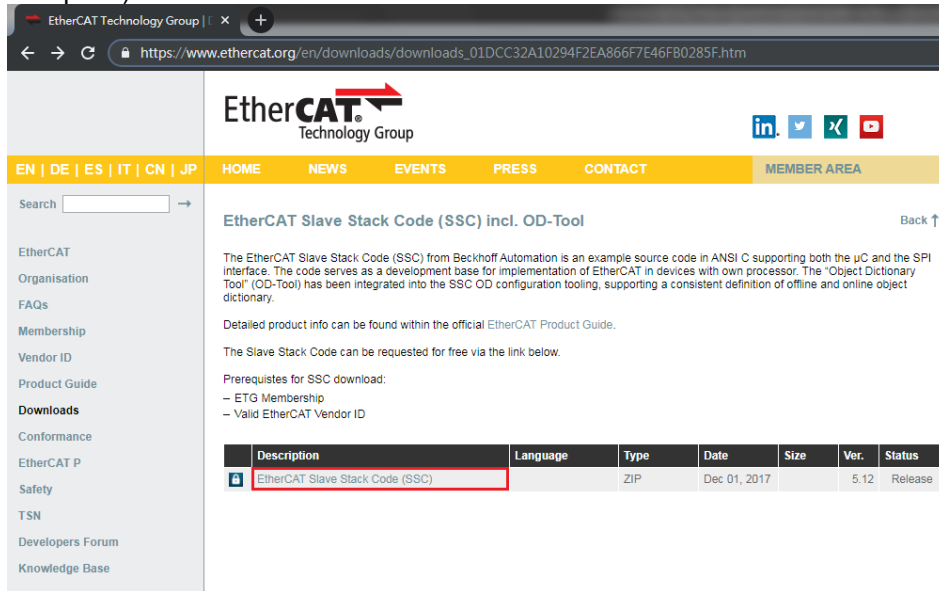


Figure 2-1

You must be an ETG member for download any contents from ETG website.
 Please type your **“User name”**, **“Password”** and click **“Login”** for download.

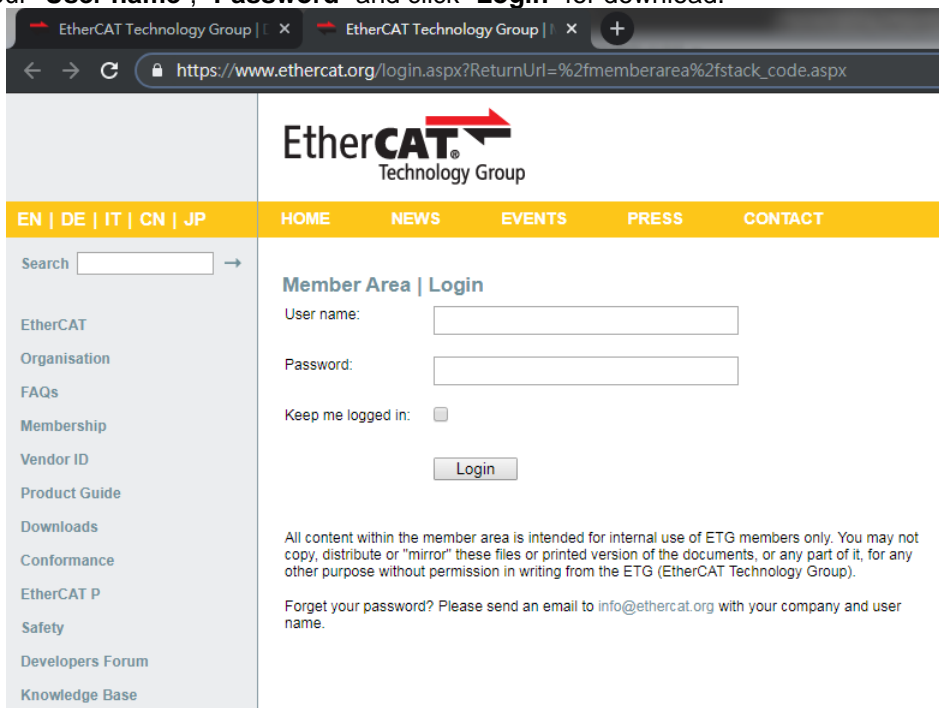


Figure 2-2

Type the EtherCAT Vendor ID of your company and click **“Submit Registration *”**.

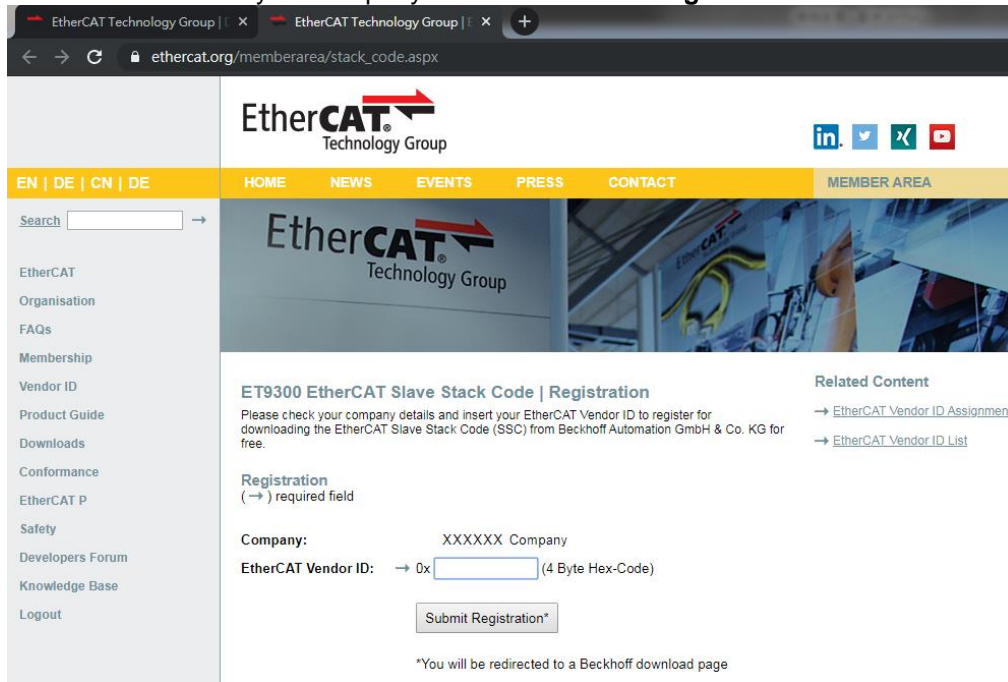


Figure 2-3

Type **“First Name”**, **“Last Name”**, **“Company”**, **“Email”**, check **“Data Privacy”** and click **“Submit”**.

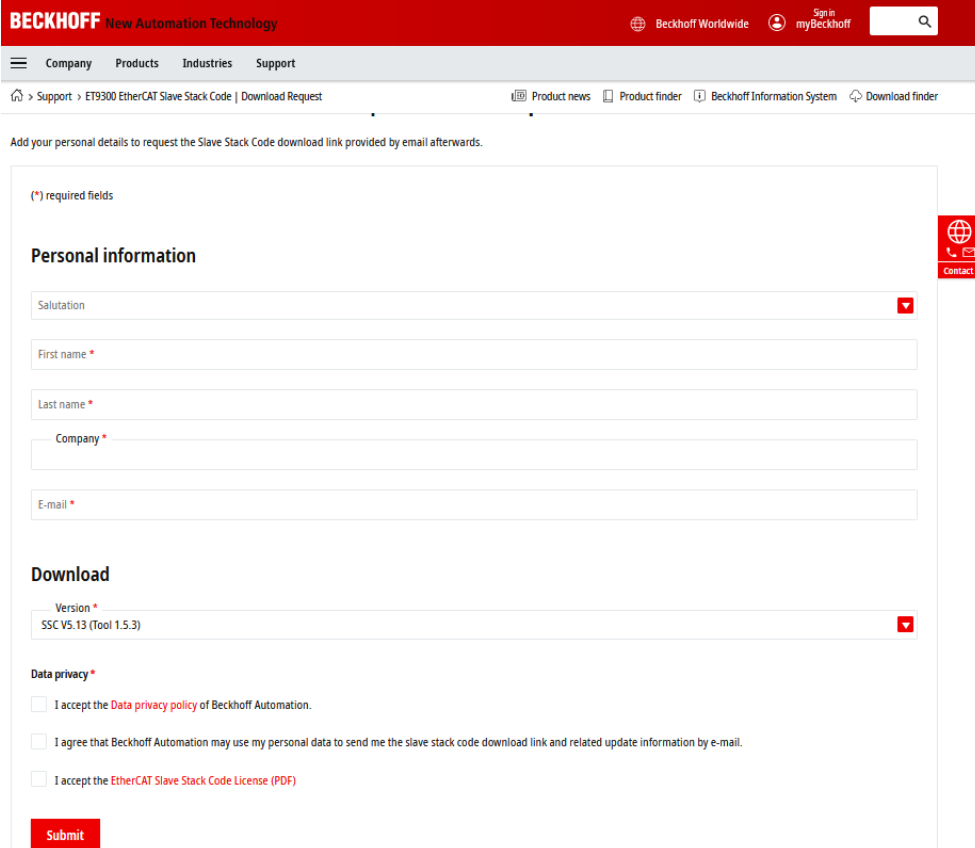


Figure 2-4

You will see below screen and receive the email later.

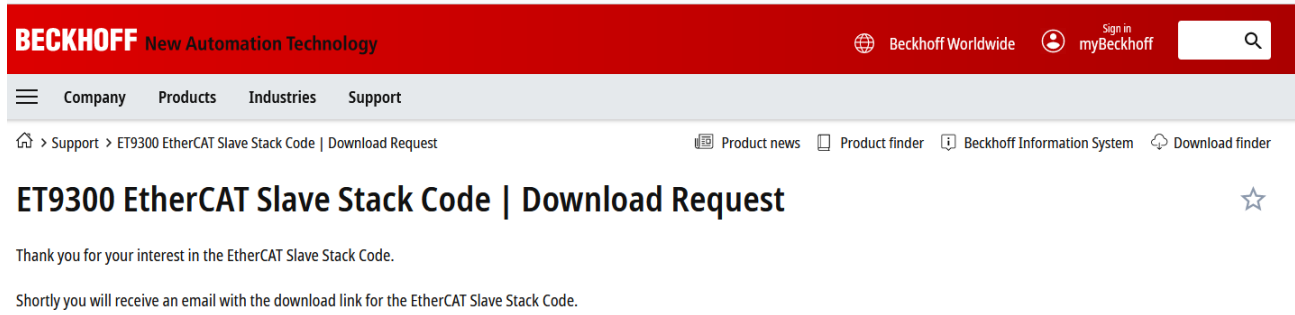


Figure 2-5

You should click the download link in the received email and you will see below screen for download page.

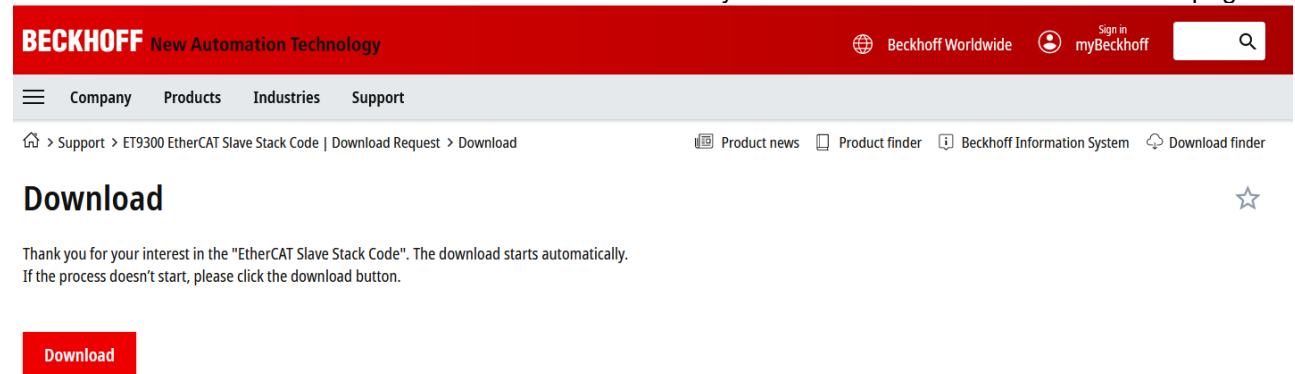
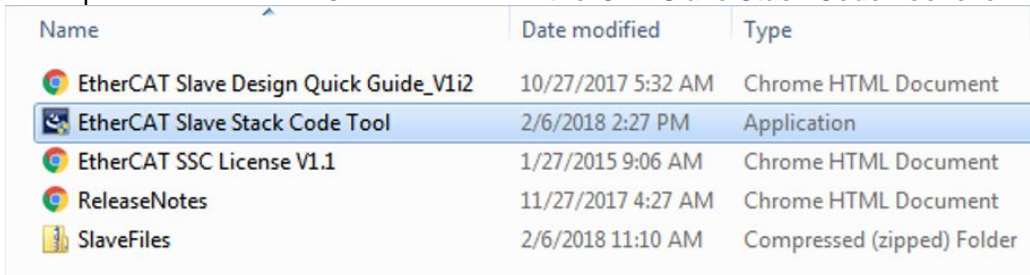


Figure 2-6

3. SSC Tool Installation

Below is an example how to install SSC Tool. Execute “**EtherCAT Slave Stack Code Tool.exe**”.



Name	Date modified	Type
EtherCAT Slave Design Quick Guide_V1i2	10/27/2017 5:32 AM	Chrome HTML Document
EtherCAT Slave Stack Code Tool	2/6/2018 2:27 PM	Application
EtherCAT SSC License V1.1	1/27/2015 9:06 AM	Chrome HTML Document
ReleaseNotes	11/27/2017 4:27 AM	Chrome HTML Document
SlaveFiles	2/6/2018 11:10 AM	Compressed (zipped) Folder

Figure 3-1

Select the language and click “**OK**”.

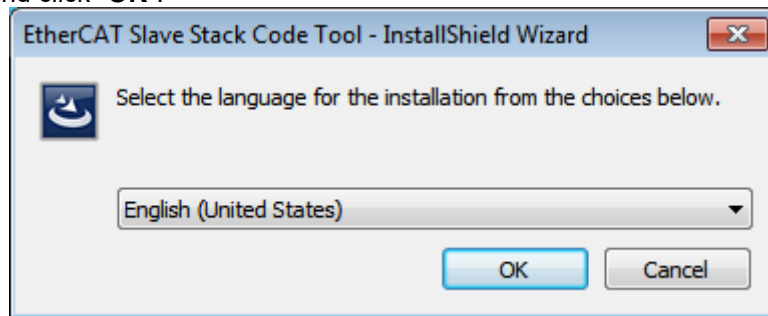


Figure 3-2

Click “**Next >**”.

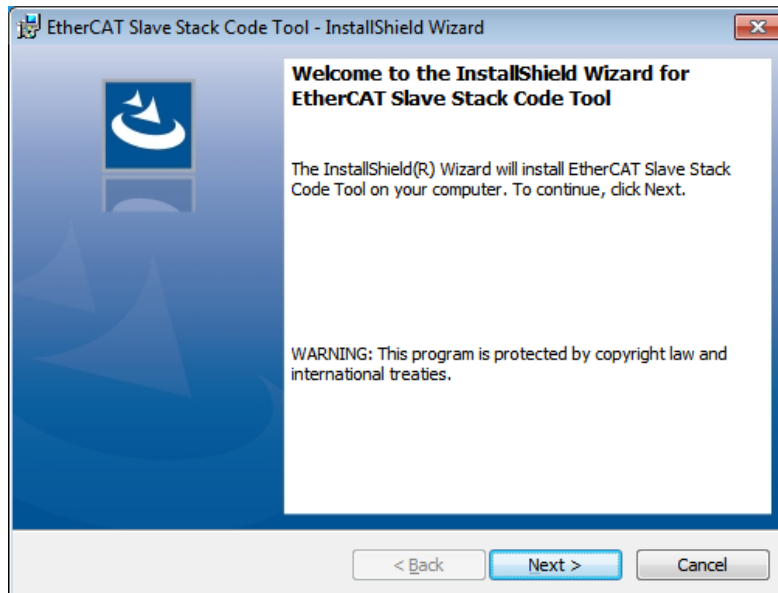


Figure 3-3

Check “I accept ...” and click “Next >”

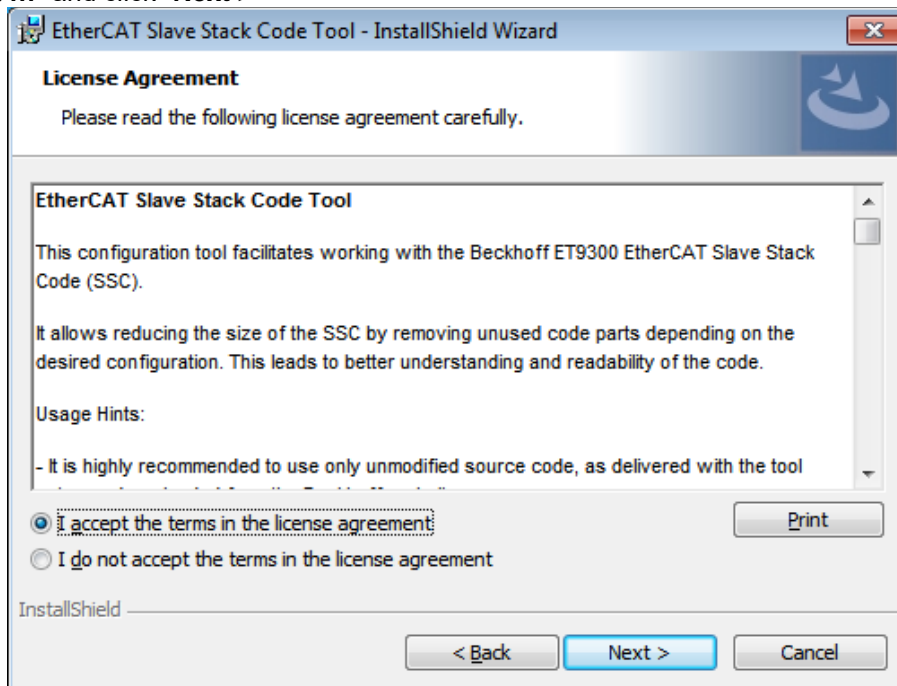


Figure 3-4

Type the “Organization”, “Vendor ID” and click “Next >”.

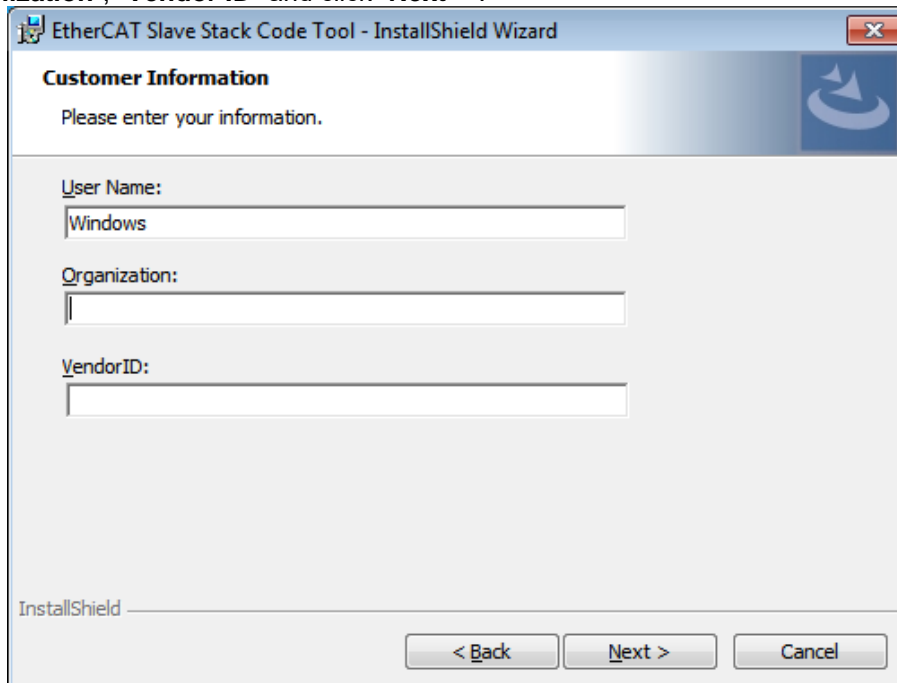


Figure 3-5

Click "Install".

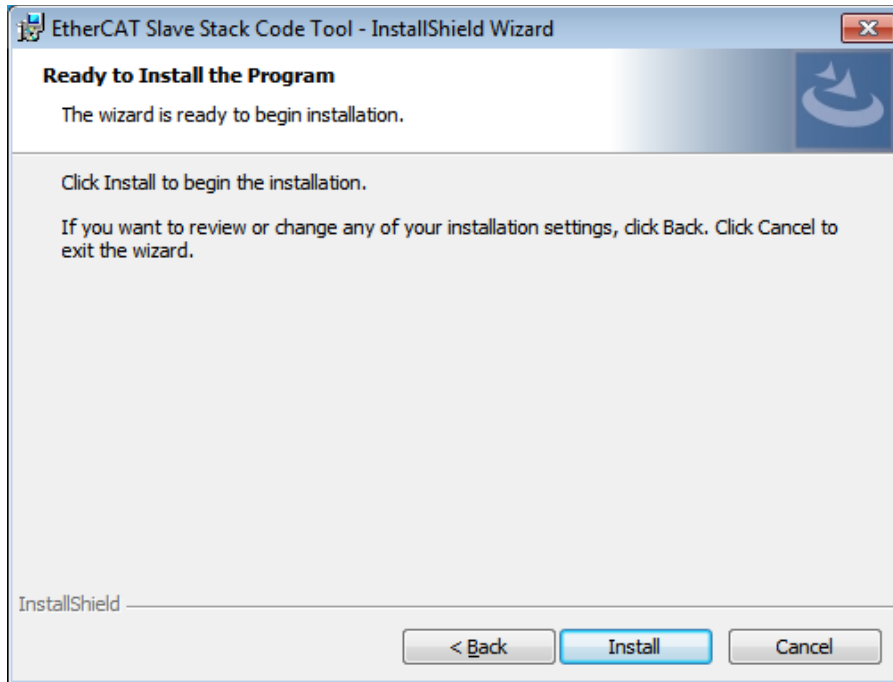


Figure 3-6

Wait a while for installation.

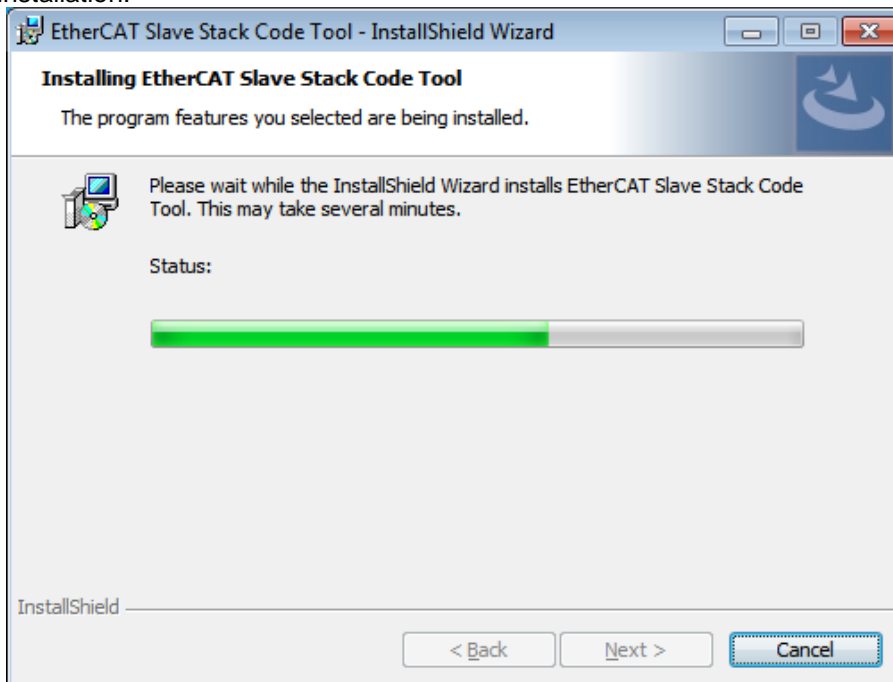


Figure 3-7

Click **Finish**.

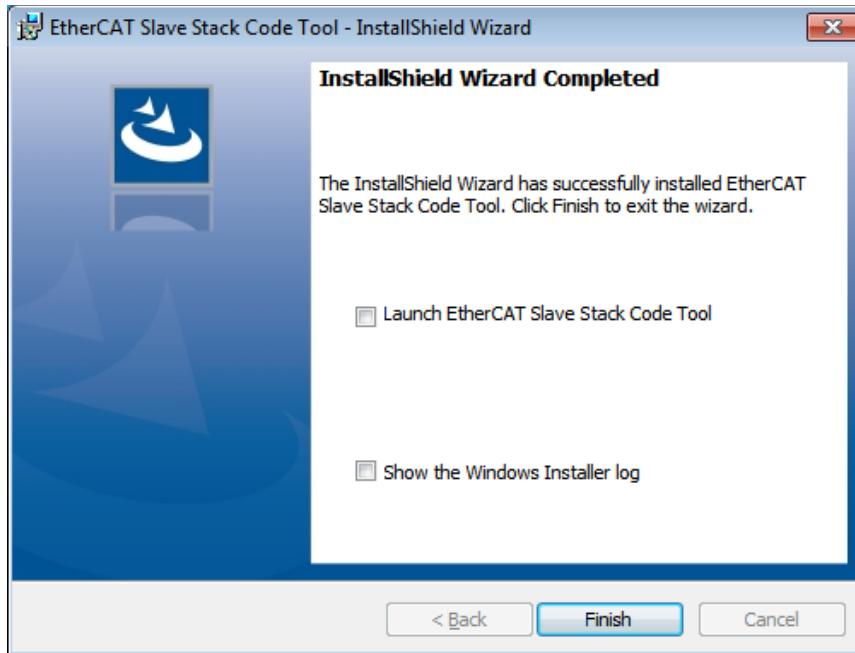


Figure 3-8

The SSC Tool shortcut already exists in your start menu.

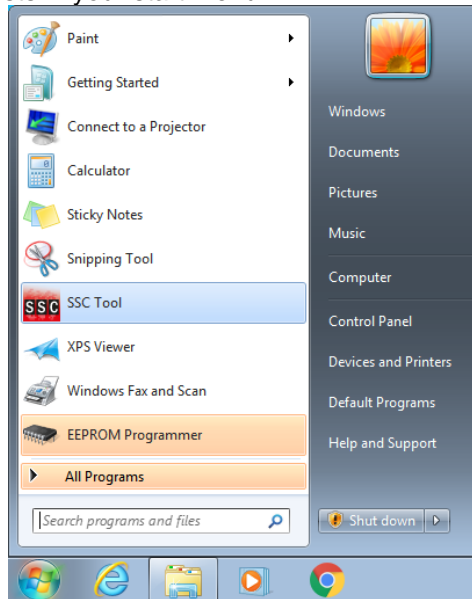


Figure 3-9

4. Import Configuration File

If the old configuration already be imported in SSC Tool of your environment, please do below 2 steps for remove it. If your SSC Tool is first time to execute, please see next page.

Step 1: Click “Tool -> Options”

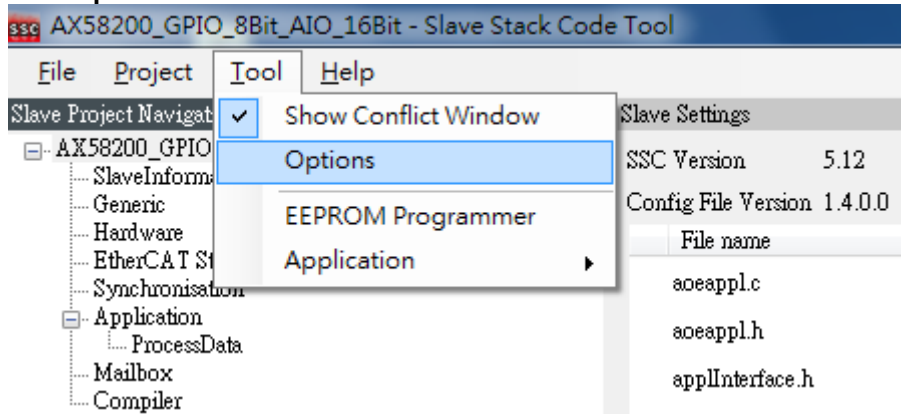


Figure 4-1

Step 2: Select the configuration item, click “-” icon and “OK”.

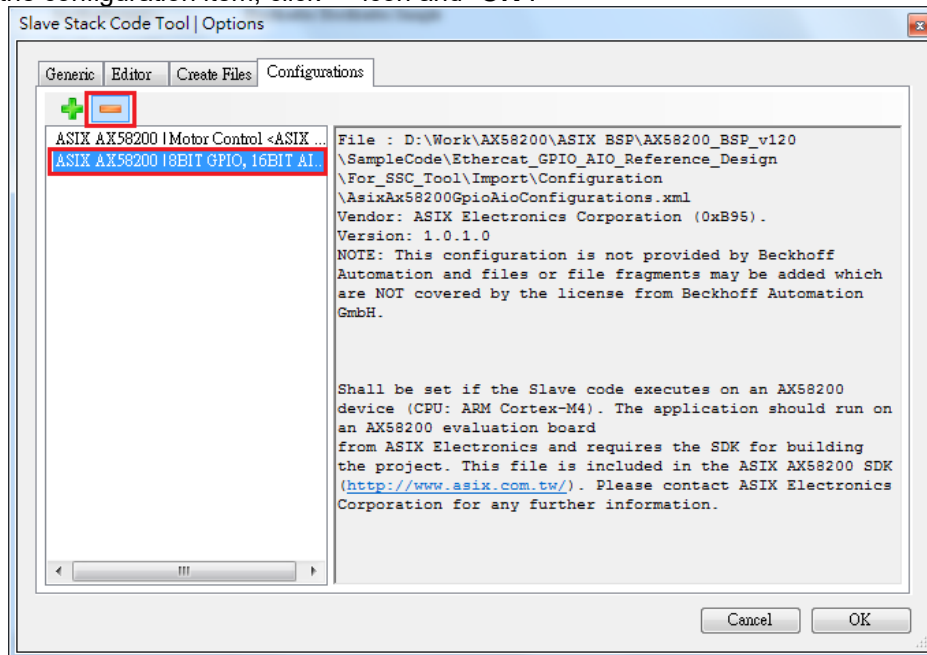


Figure 4-2

If your SSC Tool is first time to execute and you will see below screen. If you removed old configuration as above-mentioned, just click “**File -> New**”, you will also see below screen. Please select “**Custom**” field and click “**Import**”.

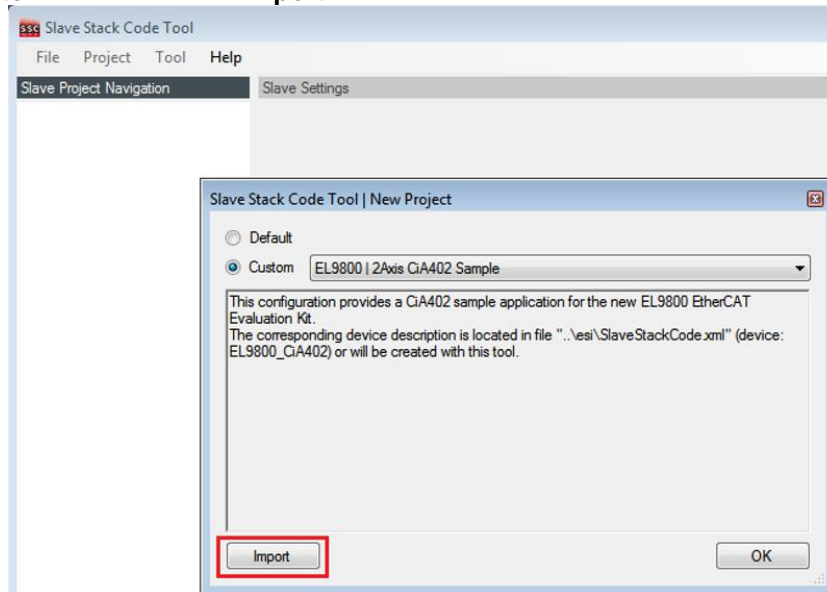


Figure 4-3

Select the configuration file in the path below and click “**Open**”.
“BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\Import\Configuration\AsixAx58200GpioAioConfigurations.xml”

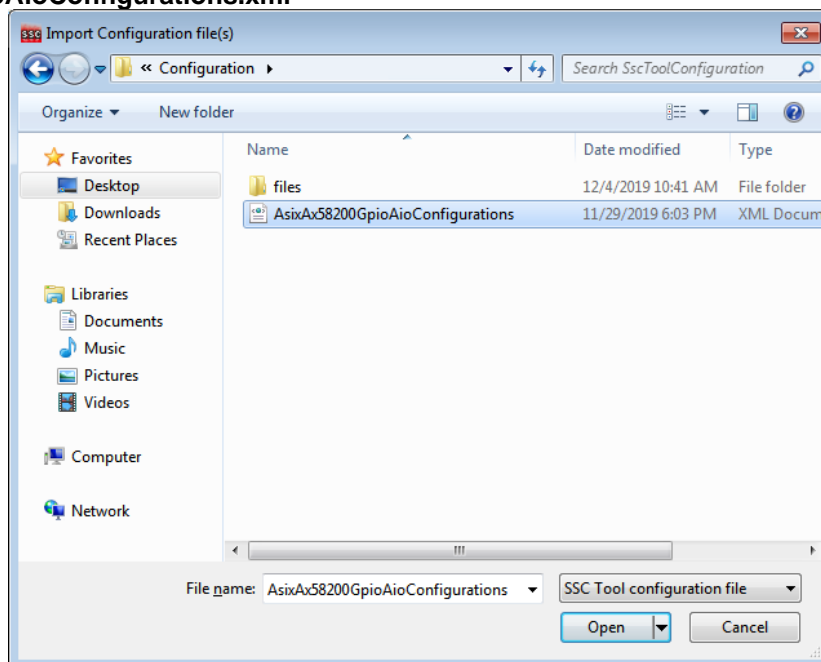


Figure 4-4

You will see below screen. The “**ASIX AX58200 | 8BIT GPIO, 16BIT AIO <ASIX Electronic Corporation>**” appears in the Custom filed. Please click “**OK**”.

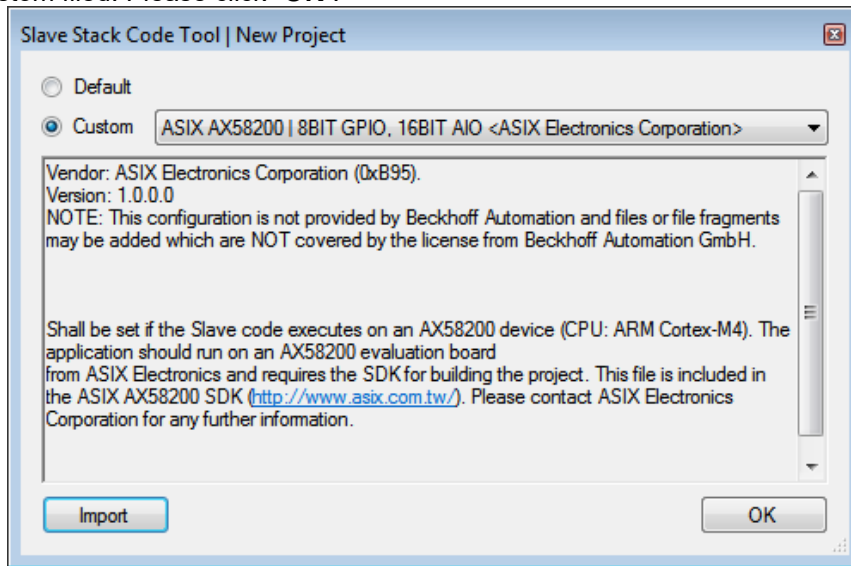


Figure 4-5

Click “**Yes**”.

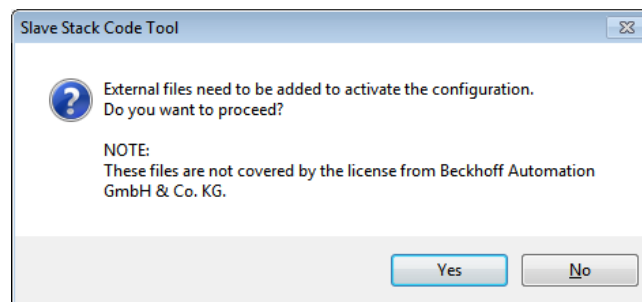


Figure 4-6

It will back to main screen of SSC Tool. Please click “**Tool -> Application -> Import**”.

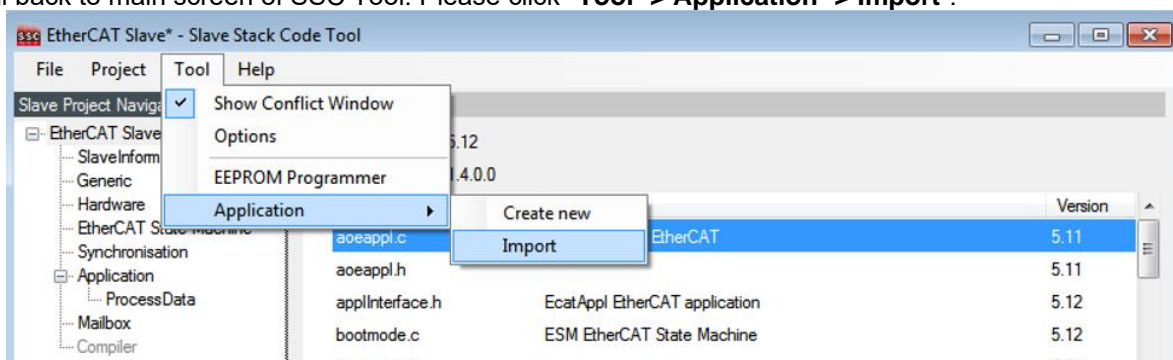


Figure 4-7

Select the excel file in the path below and click “**Open**”.
“BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\Import\Configuration Files\AX58200_GPIO_8Bit_AIO_16Bit.xlsx”

Then press “**OK**” to close excel file parsing logger dialog.

Save this SSC project by click **"File -> Save As"**.

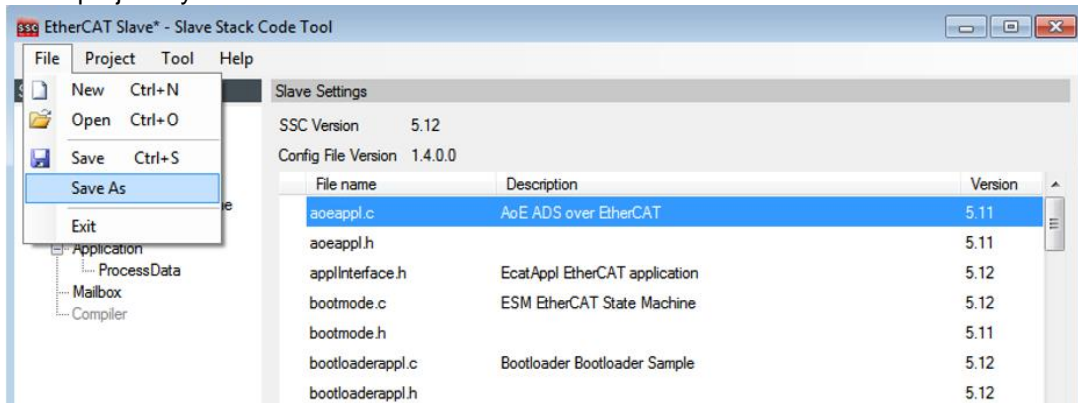


Figure 4-8

You can overwrite the file in **"BSP_ROOT\SampleCode\Ethercat_GPIO_AIO_Reference_Design\For_SSC_Tool\AX58200_GPIO_8Bit_AIO_16Bit.esp"**.

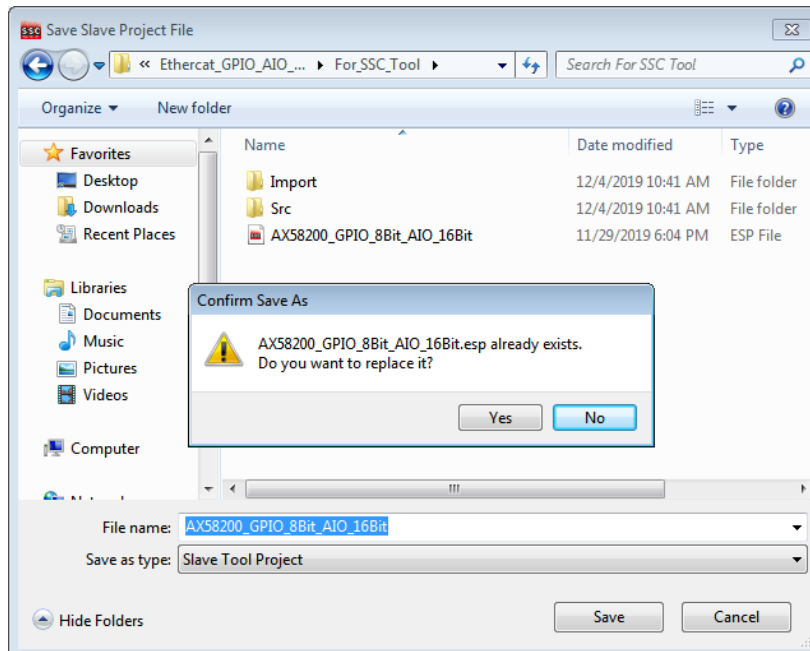


Figure 4-9

It will come back to main screen. Click "Project -> Create new Slave Files".

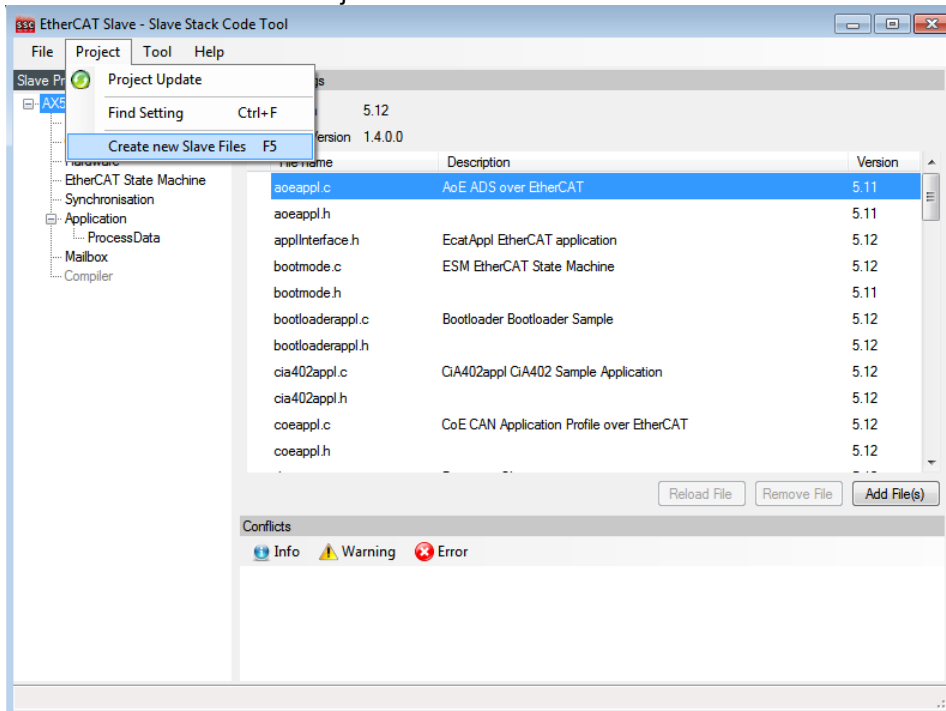


Figure 4-10

Then here will start to generate SSC source code, before press the "Start" button, please check the file paths are correct.

If the code generation is successfully as the figure below, click "OK" and "Close" to finish the procedure.

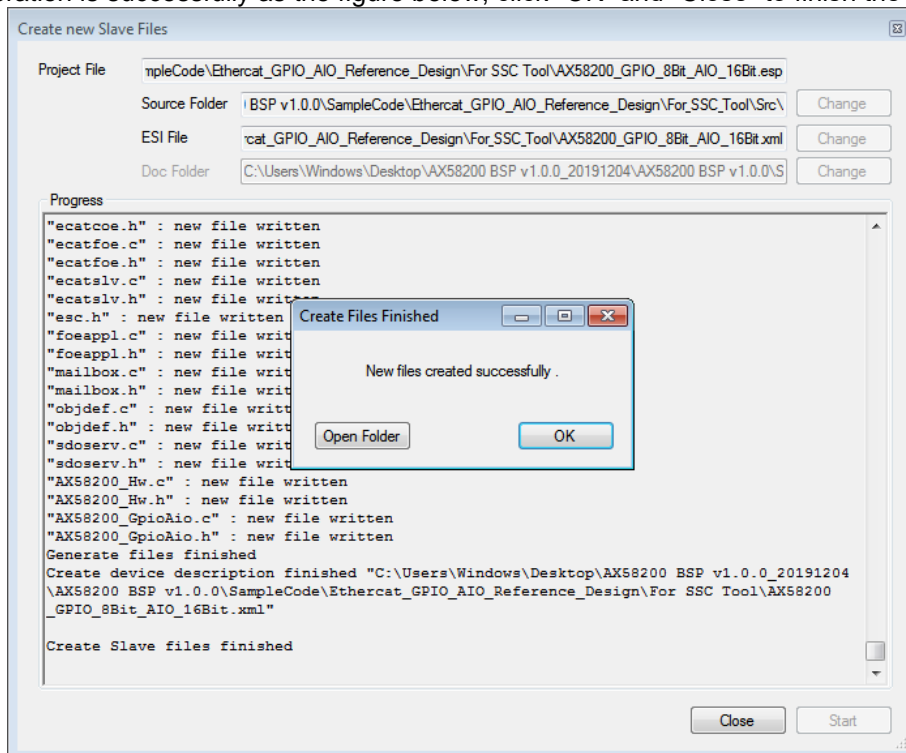
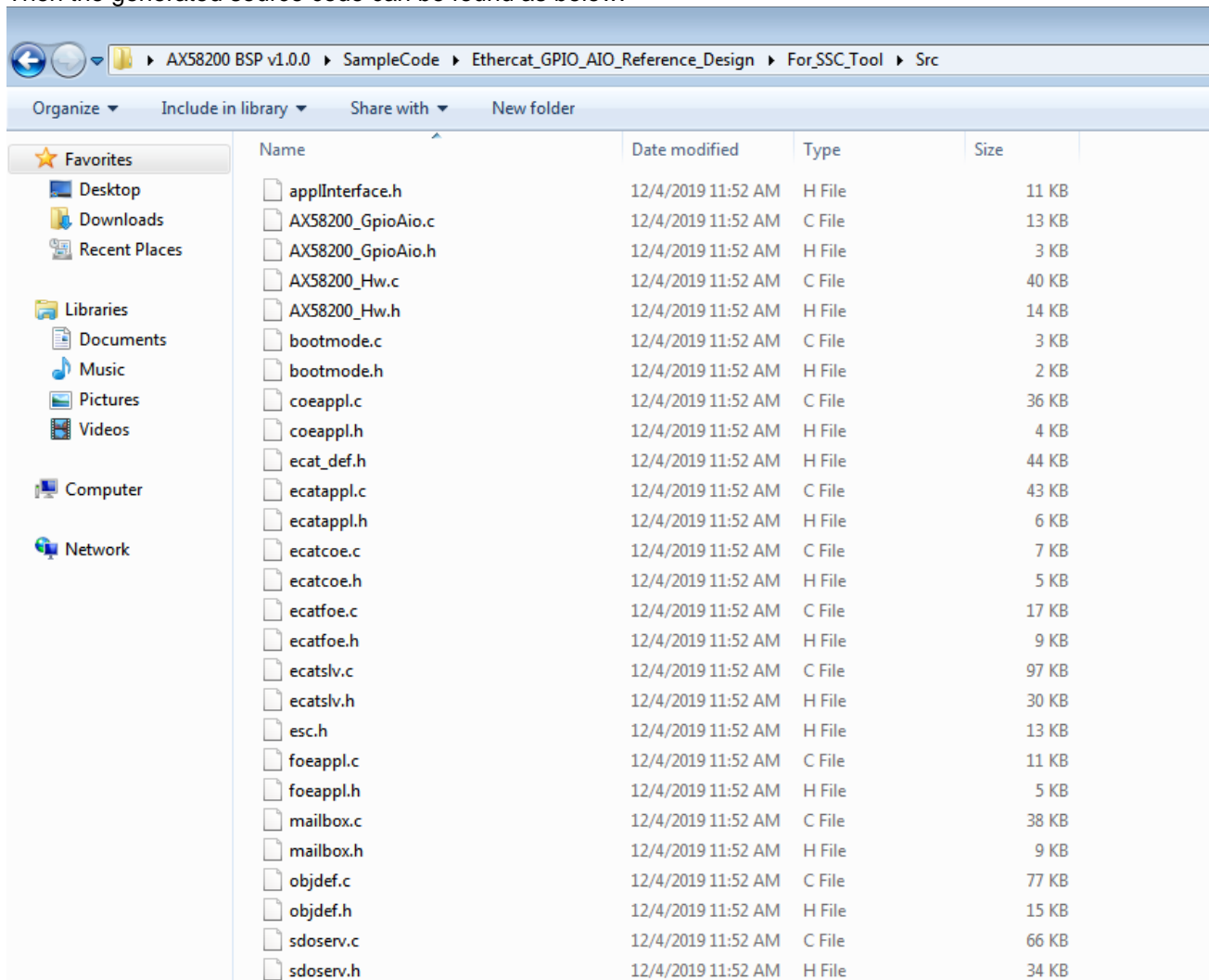


Figure 4-11

Then the generated source code can be found as below.



The screenshot shows a Windows File Explorer window with the following path: `AX58200 BSP v1.0.0 > SampleCode > Ethercat_GPIO_AIO_Reference_Design > For_SSC_Tool > Src`. The window displays a list of files and folders with columns for Name, Date modified, Type, and Size. The files listed are:

Name	Date modified	Type	Size
appInterface.h	12/4/2019 11:52 AM	H File	11 KB
AX58200_GpioAio.c	12/4/2019 11:52 AM	C File	13 KB
AX58200_GpioAio.h	12/4/2019 11:52 AM	H File	3 KB
AX58200_Hw.c	12/4/2019 11:52 AM	C File	40 KB
AX58200_Hw.h	12/4/2019 11:52 AM	H File	14 KB
bootmode.c	12/4/2019 11:52 AM	C File	3 KB
bootmode.h	12/4/2019 11:52 AM	H File	2 KB
coeappl.c	12/4/2019 11:52 AM	C File	36 KB
coeappl.h	12/4/2019 11:52 AM	H File	4 KB
ecat_def.h	12/4/2019 11:52 AM	H File	44 KB
ecatappl.c	12/4/2019 11:52 AM	C File	43 KB
ecatappl.h	12/4/2019 11:52 AM	H File	6 KB
ecatcoe.c	12/4/2019 11:52 AM	C File	7 KB
ecatcoe.h	12/4/2019 11:52 AM	H File	5 KB
ecatfoe.c	12/4/2019 11:52 AM	C File	17 KB
ecatfoe.h	12/4/2019 11:52 AM	H File	9 KB
ecatslv.c	12/4/2019 11:52 AM	C File	97 KB
ecatslv.h	12/4/2019 11:52 AM	H File	30 KB
esc.h	12/4/2019 11:52 AM	H File	13 KB
foeappl.c	12/4/2019 11:52 AM	C File	11 KB
foeappl.h	12/4/2019 11:52 AM	H File	5 KB
mailbox.c	12/4/2019 11:52 AM	C File	38 KB
mailbox.h	12/4/2019 11:52 AM	H File	9 KB
objdef.c	12/4/2019 11:52 AM	C File	77 KB
objdef.h	12/4/2019 11:52 AM	H File	15 KB
sdoserv.c	12/4/2019 11:52 AM	C File	66 KB
sdoserv.h	12/4/2019 11:52 AM	H File	34 KB

Figure 4-12

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